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| 09/684,457      | 10/05/2000  | Burton A. Hipp       | A-69624/DCA/SMF     | 2645             |

7590 03/29/2004

Flehr Hohbach Test Albritton & Herbert LLP  
Four Embarcadero Center Suite 3400  
San Francisco, CA 94111-4187

| EXAMINER |
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EL CHANTI, HUSSEIN A

| ART UNIT | PAPER NUMBER |
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2157

DATE MAILED: 03/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/684,457

Applicant(s)

HIPP, BURTON A.

Examiner

Hussein A El-chanti

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to application filed on Oct. 5, 2000. Claims 1-32 are pending examination.

#### ***Specification***

2. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims are rejected under 35 U.S.C. 102(e) as being anticipated by Coile et al., U.S. Patent No. 6,061,349 (referred to hereafter as Coile).

As to claim 1, Coile teaches a method of providing communication between at least two applications, comprising the steps of:

accepting a connection from a second application on a first port (see col. 2 lines 45-col. 3 lines 5);

allocating a second port to receive the communication from the second application (see col. 2 lines 45-col. 3 lines 5);

recording the translation of the second port (see col. 2 lines 45-col. 3 lines 5);  
sending the communication to the first port from the second application (see col. 2 lines 45-col. 3 lines 5);  
receiving the communication on the second port (see col. 2 lines 45-col. 3 lines 5); and  
delivering the communication to a first application from the second port (see col. 2 lines 45-col. 3 lines 5).

As to claim 2, Coile teaches the method as claimed in claim, further comprising the step of listening on the first port for the connection from the second application (see col. 2 lines 61-67).

As to claim 3, Coile teaches the method as claimed in claim 1, further comprising the step of the first application requesting the communication from the first port; and translating the first port in the request for the communication to determine the second port such that the communication is delivered to the first application in the step of delivering the communication to the first application (see col. 2 lines 53-67).

As to claim 4, Coile teaches the method as claimed in claim 1, further comprising the steps of receiving the communication on the first port following the step of sending the data to the first port; and

translating the first port to determine the second port prior to the step of receiving the communication on the second port (see col. 2 lines 53-67).

As to claim 5, Coile teaches the method as claimed in claim 4, wherein: the step of receiving the communication on the second port including queuing the communication on the second port from the first port (col. 10 lines 50-67).

As to claim 6, Coile teaches the method as claimed in claim 1, further comprising the steps of the second application requesting to connect with the first port prior to the step of accepting the connection (col. 10 lines 50-67).

As to claim 7, Coile teaches the method as claimed in claim 1, further comprising the steps of negotiating the second port following the step of allocating the second port (col. 10 lines 29-67).

As to claim 8, Coile teaches the method as claimed in claim 7, wherein: the step of negotiating including negotiating the second port between a first and second virtual port multiplexer (col. 10 lines 29-67).

As to claim 9, Coile teaches the method as claimed in claim 1, further comprising the steps of connecting the second application with the second port following the step of allocating the second port (col. 10 lines 50-67).

As to claim 10, Coile teaches the method as claimed in claim 9, wherein:

the step of recording the translation including:

a) recording the translation of the second port in association with the first application (see col. 2 lines 45-col. 3 lines 5); and

b) recording the translation of the second port in association with the second application (see col. 2 lines 45-col. 3 lines 5).

As to claim 11, Coile teaches the method as claimed in claim 10, wherein:

the step of recording the translation of the second port in association with the first application including recording the translation in a first virtual port multiplexer (see col. 9 lines 1-59).

As to claim 12, Coile teaches the method as claimed in claim 11, wherein:

the step of recording the translation of the second port in association with the second application including recording the translation in a second virtual port multiplexer (see col. 9 lines 1-59).

As to claim 13, Coile teaches the method as claimed in claim 10, wherein:

the step of sending the communication to the first port from the second application including directing the communication a[ a first port number and translating the first port number to a second port number; and

sending the communication to the second port utilizing the second port number prior to the step of receiving the communication on the second port (see col. 9 lines 60- col. 10 lines 15).

As to claim 14, Coile teaches the method as claimed in claim 1, further comprising the step of

returning to the second application a virtual socket connection to the first port prior to the step of sending the communication to the first port from the second application (see col. 9 lines 1-59).

As to claim 15, Coile teaches the method as claimed in claim 1, wherein: the step of delivering the communication to the first application from the second port including

rewriting the communication to appear to the first application as though the communication is delivered from the first port (see col. 9 lines 1-59).

As to claim 16, Coile teaches the method as claimed in claim 15, wherein: the step of rewriting including rewriting a header of the communication to include at least the first port (see col. 9 lines 1-59).

As to claim 17, Coile teaches the method as claimed in claim 16, wherein: the step of rewriting including rewriting the header of the communication to include a revised checksum (see col. 9 lines 1-59).

As to claim 18, Coile teaches a computer system providing a method for multiplexing at least one port, comprising the steps of:

- receiving a request to access a first port from a first application;
- receiving a connection on the first port from a second application;
- allocating a new port; and
- returning the connection to the new port (see col. 2 lines 45-col. 3 lines 5).

As to claim 19, Coile teaches the computer system as claimed in claim 18, further comprising the step of

- translating the new port including determining an application identifier (AID) and internet protocol (IP) address (see col. 14 lines 43-col. 15 lines 8).

As to claim 20, Coile teaches the computer system as claimed in claim 19, further comprising the step of

- negotiating the new port prior to the step of translating the new port (col. 10 lines 29-67).

As to claim 21, Coile teaches the computer system as claimed in claim 20, further comprising the step of acknowledging the new port prior to the step of translating of the new port;

returning the virtual port connection to the second application (see col. 10 lines 50-67)

As to claim 22, Coile teaches the computer system as claimed in claim 21, further comprising the step of the second application requesting connection to the first port prior to the step of receiving a connection (see col. 3 lines 50-67).

As to claim 23, Coile teaches a computer program product for performing virtual port multiplexing of a plurality of ports to allow communication between at least a first and second computer, the computer program product including a computer readable medium and a computer program mechanism stored thereon, the computer program mechanism comprising:

a virtual port multiplexing procedure configured to:

- a) accept a connection from a second application on a first port;
- b) allocate a second port to receive the communication from the second application;
- c) record the translation of the second port;
- d) send the communication to the first port from the second application;
- e) receive the communication on the second port; and
- f) deliver the communication to a first application from the second port (see col. 2 lines 45-col. 3 lines 5).



As to claim 24, Coile teaches the computer program product as claimed in claim 23, further comprising the step of

listening on the first port for the connection from the second application;

the first application requesting the communication from the first port;

translating the first port in the request for the communication to determine the second port such that the communication is delivered to the first application in the step of delivering the communication to the first application;

receiving the communication on the first port following the step of sending the data to the first port; and

translating the first port to determine the second port prior to the step of receiving the communication on the second port (see col. 2 lines 45-col. 3 lines 5).

As to claim 25, Coile teaches the computer program product as claimed in claim 23, further comprising the steps of

negotiating the second port following the step of allocating the second port including

negotiating the second port between a first and second virtual port multiplexer;

connecting the second application with the second port following the step of allocating the second port; and

the step of recording the translation including:

a) recording the translation of the second port in association with the first application; and

b) recording the translation of the second port in association with the second application (col. 10 lines 29-67).

As to claim 26, Coile teaches an apparatus for providing communication between at least two computers, the apparatus comprising:

- a first computer coupled with a first virtual port multiplexer;
- at least a first and second port coupled with the first virtual port multiplexer;
- a second computer coupled with at least the first port, and the second computer configured to at least direct communication to the first port;

- the first computer configured to at least receive the communication from the second port; and

- the first virtual port multiplexer configured to at least record a translation of the first port in relation to the second port (see col. 2 lines 45-col. 3 lines 5)..

As to claim 27, Coile teaches the apparatus as claimed in claim 26, further comprising:

- a second virtual port multiplexer coupled with the second computer and with at least the first and second ports; and

- the second virtual port multiplexer configured to at least record the translation of the first port to the second port (see col. 2 lines 45-col. 3 lines 5)..

As to claim 28, Coile teaches the apparatus as claimed in claim 27, wherein:

- the first virtual multiplexer couples with the second virtual multiplexer such that the first and second virtual multiplexers are configured to at least communicate the translation between the first port and the second port. (see col. 2 lines 45-col. 3 lines 5).

As to claim 29, Coile teaches the apparatus as claimed in claim 26, wherein:  
the first computer further configured to operate a first application;  
the second computer further configured to operate a second application; and  
the first and second applications being configured to communicate such that the second computer at least directs the communication from the second application and the first computer at least receives the communication for the first application (see col. 9 lines 1-59).

As to claim 30, Coile teaches the apparatus as claimed in claim 26, wherein:  
the first multiplexer is configured to rewrite the communication to at least appear to the first computer that the communication is received from the first port (see col. 9 lines 1-59).

As to claim 31, Coile teaches the apparatus as claimed in claim 30, wherein:  
the first multiplexer having a means for translating at least the first port in relation to the second port (see col. 14 lines 29-col. 15 lines 20).

As to claim 32, Coile teaches the apparatus as claimed in claim 30, wherein: the first multiplexer having a lookup table to translate the first port in relation to the second port (see col. 14 lines 29-col. 15 lines 20).


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A El-chanti whose telephone number is (703)305-4652. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

March 17, 2004

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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